

California Energy Commission

## **STAFF REPORT**

# **LOCALIZED HEALTH IMPACTS REPORT**

Addendum 1 for a Project With Location Changes Awarded  
Funding Through the Alternative and Renewable Fuel and  
Vehicle Technology Program Under Solicitation GFO-16-605  
– Innovative Service Mobility Demonstration With Zero-  
Emission Vehicles

**California Energy Commission**

Edmund G. Brown Jr., Governor



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# California Energy Commission

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## **DISCLAIMER**

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# ADDENDUM 1

The *Localized Health Impacts (LHI) Report for Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation GFO-16-605* was posted November 7, 2017 (CEC-600-2017-009).<sup>1</sup> This addendum uses the same approach to assess the localized health impacts for a project with added locations. Envoy Technologies, Inc. is proposing adding nine additional Level 2 electric vehicle charging stations at residential parking spaced for car-sharing vehicles. The newly proposed locations are described in Table 1, along with environmental justice (EJ) indicators.<sup>2</sup> (See Appendix A.).

**Table 1: Additional Electric Vehicle Charging Station Locations for Envoy, Inc., Along With Environmental Justice Indicators**

Original Site Locations	New Site Locations	EJ Indicator(s)
Not applicable	3711 19 <sup>th</sup> Avenue San Francisco, CA 94132	Minority
Not applicable	202-298 Cardenas Avenue San Francisco, CA 94132	Minority
Not applicable	99-1 Serrano Drive San Francisco, CA 94132	Minority
Not applicable	228 Serrano Drive San Francisco, CA 94132	Minority
Not applicable	770-734 Gonzales Drive San Francisco, CA 94132	Minority
Not applicable	564 Arballo Drive San Francisco, CA 94132	Minority
Not applicable	234 Garces Drive San Francisco, CA 94132	Minority
Not applicable	22 Josepha Avenue San Francisco, CA 94132	Minority

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<sup>1</sup> Brecht, Patrick, 2017. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2017-009.

<sup>2</sup> The EJ indicators follow: (i.) minority subset represents more than 30 percent of a given city's population (2010), (ii.) city's poverty exceeds California's poverty level of 15.8 percent (2012-2016), (iii.) city's unemployment rate exceeds California's unemployment rate of 4.3 percent as of February 2018, and (iv.) city's percentage of persons younger than 5 years of age or older than 65 years of age is 20 percent higher than California's average. For the entire state, the percentage of persons under the age of 5 years is 6.8 percent, and the percentage of persons over the age of 65 years is 11.4 percent.

Original Site Locations	New Site Locations	EJ Indicator(s)
Not applicable	220 Font Boulevard San Francisco, CA 94132	Minority

Source: California Energy Commission staff

## Air Quality and EJ Indicators

The newly proposed station locations (electric vehicle charging stations) are all in nonattainment zones for ozone, particulate matter (PM<sup>3</sup>) 2.5, and PM 10. If a project site is in a nonattainment zone and has more than one EJ indicator, as shown in Table 1, with detail in Table 2, it is considered a high-risk community, according to the Environmental Justice Screening Method.<sup>4</sup> According to staff's assessment, San Francisco is not considered a high-risk community.

**Table 2: Environmental Justice (EJ) Indicators Compared With California**  
The yellow highlighted area indicates numbers (%) that meet the definition for EJ indicators

	Below Poverty Level (2012-2016)	Black Persons (2010)	American Indian and/or Alaska Native (2010)	Asian and/or Pacific Islander (2010)	Persons of Hispanic or Latino Origin (2010)	Persons Under 5 Years of Age (2010)	Persons Over 65 Years of Age (2010)	Unemployment (February 2018)
California	15.8%	6.2%	1.0%	13.0%	37.6%	6.8%	11.4%	4.3%
EJ Indicator Threshold	>15.8%	>30%	>30%	>30%	>30%	>8.16%	>13.8%	>4.3%
San Francisco	12.5%	6.1%	0.5%	33.3%	15.1%	4.4%	13.6%	2.6%

Sources: Unemployment information from the State of California, Employee Development Department Labor Market Information Div.: <http://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html#Tool>. U.S. Census Bureau, <http://www.census.gov/quickfacts/table/PST045215/0664000.06.00>, and [http://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml).

<sup>3</sup> "Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled. The numbers stand for microns in diameter.

<sup>4</sup> California Air Resources Board (ARB), *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

## **Location Analysis and Community Impacts**

The proposed station locations were assessed according to the original LHI. The environmental justice indicators are comparable to the original set of station locations. The charger quantity and type, along with the estimated gasoline gallons displaced, are also comparable, and the anticipated impact to the communities where the electric vehicle chargers will be located remains positive in terms of cleaner air and anticipated greenhouse gas reductions.

# APPENDIX A:

## Localized Health Impact Report Assessment Method

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This LHI Report assesses the potential impacts to communities because of the projects proposed by the ARFVTP. This report is prepared under the *California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1 (CCR § 2343)*:

(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider environmental justice consistent with state law and complete the following:

(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

(B) Projects must be selected and approved for funding in a publicly noticed meeting.

This LHI Report is not intended to be a detailed environmental health impact analysis of proposed projects nor is it intended to substitute for the environmental review conducted during the California Environmental Quality Act (CEQA) review. This LHI Report includes staff's application of the Environmental Justice Screening Method (EJSM) to identify projects located in areas with social vulnerability indicators and the greatest exposure to air pollution and associated health risks.<sup>5</sup>

The EJSM was developed to identify low-income communities highly affected by air pollution for assessing the impacts of climate change regulations, specifically Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006. The EJSM integrates data on (1) exposure to air pollution, (2) cancer risk, (3) ozone concentration, (4) frequency of high ozone days, (5) race/ethnicity, (6) poverty level, (7) home ownership, (8) median household value, (9) educational attainment, and (10) sensitive populations (populations under 5 years of age or over 65 years of age).

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<sup>5</sup> California Air Resources Board (ARB). *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making, 2010*. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

To determine high-risk communities, environmental justice (EJ) indicators for locations of the electric vehicle charging stations are compared to data from the U.S. Census Bureau or other public agency. Staff identifies high-risk communities by using a two-part standard. For a community to be considered high-risk, for this assessment, it must meet both Parts 1 and 2 of this standard.

*Part 1:*

- Communities located in nonattainment air basins for ozone, PM 2.5 or PM 10

*Part 2:*

- Communities having more than one of the following EJ indicators: (1) minority, (2) poverty, (3) unemployment, and (4) high percentage of population under 5 years of age and over 65 years of age. The EJ indicators follow:
  - A minority subset represents more than 30 percent of a given city's population.
  - A city's poverty level exceeds California's poverty level.
  - A city's unemployment rate exceeds California's unemployment rate.
  - The percentage of people living in that city are younger than 5 years of age or older than 65 years of age is 20 percent higher than the average percentage of persons under 5 years of age or over 65 years of age for all of California.